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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,238	04/14/2005	Vince Ciccone	TPP 31759	7869

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EXAMINER

HECKENBERG JR, DONALD H

ART UNIT	PAPER NUMBER
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1722

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/531,238

Applicant(s)

CICCONE ET AL.

Examiner

Donald Heckenberg

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

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1. The following is a quotation of the second paragraph of 35

U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 17-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Claims 17-28 are all recited as depending from either claim 1, 3, 4 or 6. Claims 1, 3, 4 and 6, however, were cancelled by the amendment of 14 April 2005. As such, claims 17-28 are indefinite. For purposes of further examination in this Office Action, claims 17-28 will be interpreted as depending on the claim still pending that appears to corresponding to the original claims. Thus, when a claim refers to claim 1, the claim will be interpreted as depending from claim 16; when a claim refers to claim 3, the claim will be interpreted as depending from claim 18; when a claim refers to claim 4, the claim will be interpreted as depending from claim 19; and when a claim refers to claim 6, the claim will be interpreted as depending from claim 21.

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that

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was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 16-19, 23, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vovan (U.S. Pat. No. 6,120,279) in view of Applicant's admitted prior art.

Vovan discloses a mold insert positioning system for an injection molding apparatus. The insert system includes a mold core plate (16) defining a face which forms part of the mold cavity (cl. 2, ll. 10-14). The face includes a facial pocket (14) for insertion of a mold insert (12). The facial pocket defines a passageway extending through the plate (see Figs. 3-6). The mold insert is integrally connected to a rod, with the rod insertable in the passageway (Figs. 3-6). The rod includes transverse slots (40 and 42).

Vovan further discloses passageways extending transversely to and communicating with the insert passageway, with locking members (30 and 32) insertable into the transverse passageway (Fig. 1). The locking members are rotatable about their axis and include portions within the slots on the insert rod (Figs.

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3-6). As such, the locking members may be rotated to lock the insert within the insert passageway (cl. 2, ll. 20-23).

In one embodiment, Vovan discloses the locking members to include a cam rods (110 and 112) extending axially offset from the axis of the locking member (see Figs. 9-11). The offset cam rod is as such to engage the slot of the insert rod so that rotation of the locking members about their axis causes the offset rod to act of the insert rod (Figs. 9-11). Vovan also discloses a wrench may be connected to the locking members (cl. 2, 44-47). With the wrench connected, the locking members would have handles or knobs for effectuating their movement.

While Vovan notes that the disclosed mold insert system is to be used with an injection molding apparatus (cl. 1, ll. 4-7), Vovan does not disclose the particulars of the molding apparatus. Applicant discloses, however, that the known prior art injection molding apparatus include mold core and cavity plates secured to mold bases, with the core and cavity plates relatively movable between open and closed position, and the core and cavity plates defining a mold cavity between their opposed faces (see Fig. 1 of the instant application and the corresponding description in the specification). As such, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have used the mold insert

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system disclosed by Vovan within an injection molding apparatus which includes mold core plates, cavity plates, and mold bases, arranged to form the mold cavity because Vovan specifically notes the insert is for use in an injection molding apparatus, and Applicant's notes that such a structure is known in the art for an injection molding apparatus.

It is noted that the claims of the instant application define a manner in which the claimed mold insert device is to be operated. For example, claim 16 defines the process by which the insert is first partially inserted into the facial pocket, and then urged into the fully inserted position. An apparatus, however, must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997); MPEP 2114. A claim containing a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus if the prior art teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987); MPEP 2114. The combination of Vovan and Applicant's admitted prior art discloses and suggests all of the structural features of the claimed apparatus as described above. As such, the combination renders obvious the claims of the instant

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application, regardless of the defined operating manner in the claims of the mold insert system.

7. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vovan and Applicant's admitted prior art as applied to claims 16-19, 23, 26 and 27, and further in view of Poglein (U.S. Pat. No. 2,291,580).

Vovan in combination with Applicant's admitted prior art suggests the apparatus as described above. Notably, Vovan discloses the insert rod to be integral with the insert. The combination does not disclose an alternative with the insert and rod being two pieces connected by a screw. Such a structure, however, is known in the art as demonstrated by Poglein. The Poglein reference discloses a removable mold insert, wherein the insert (3 and 4) which is connected to an insert rod using a screw (see Figs. 1 and 2; p. 1, ll. 5-12). Thus, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have modified the apparatus suggested by Vovan and Applicant's admitted prior art as such to have a two piece insert and insert rod connected by a screw because this is an alternative configuration known in the art as suggested by Poglein.

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8. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vovan and Applicant admitted prior art as applied to claims 16-19, 23, 26 and 27, and further in view of Takahashi (U.S. Pat. No. 5,466,145).

Vovan in combination with Applicant's admitted prior art suggests the apparatus as described above. The combination does not disclose a configuration with gear members on the locking rod and mating slots on the insert rod. However, such a mechanism gear and slot mechanism is well known. As an example, Takahashi discloses an injection molding apparatus with an insert (2), and insert rod (20), and a locking rods (22), wherein gears (23) provided on the locking rods mate with slots on the insert rod to provide for movement of the insert rod (see Fig. 1 and corresponding description). Therefore, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have modified the apparatus suggested by Vovan and Applicant's admitted prior art as such to have used gears and mating slots to effectuate movement of the insert rod by the locking rods because such structures are a known alternative in the art as suggested by Takahashi.

9. Claims 20 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vovan and Applicant's admitted prior art

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as applied to claims 16-19, 23, 26 and 27, and further in view of Japanese Pub. No. 07-9456 (previously made of record in the I.D.S. filed by Applicant; hereinafter "JP '456").

Vovan in combination with Applicant's admitted prior art suggests the apparatus as described above. The combination does not disclose dowels for locking the cam handle. The combination also does not disclose a slanted profile on the locking rod to engage the insert rod.

JP '456 discloses an injection molding apparatus, which includes an insert and insert rod (3) and locking rod (6), with the locking rod having a handle at its end (see Fig. b). Dowel rivets (10) are provided for the purpose of locking the handle, and thus insert rod (see Abstract).

JP '456 further disclose a slanted profile on the locking rod for engaging the slot on the insert rod (see Fig. a). The profile causes movement of insert rod through rotation of the locking rod.

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have modified the device suggested by Vovan and Applicant's admitted prior art as such to have further included a dowel rivet because such a structure would allow for locking of the cam handle as suggested by JP '456.

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It further would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have modified the device suggested by Vovan and Applicant's as such to comprise a slanted profile on the locking rod which engages the insert rod because this is an alternative known in the art for allowing the locking rod to move the insert rod as suggested by JP '456.


10. Claims 22 and 28 would be allowable if rewritten to overcome the rejections under 35 U.S.C. 112, 2nd paragraph, set forth in this Office Action and to include all of the limitations of the base claim and any intervening claims.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald Heckenberg whose telephone number is (571) 272-1131. The examiner can normally be reached on Monday through Friday from 9:30 A.M. to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta, can be reached at (571) 272-1316. The official fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <<<http://pair-direct.uspto.gov>>>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

  
Donald Heckenberg  
Primary Examiner  
A.U. 1722

9-18-6